SAN JOSE TO MERCED

South Santa Clara County Community Engagement Workshop #3

June 16, 2011
June 23, 2011

CALIFORNIA High-Speed Rail

TONIGHT'S WORKSHOP

3nd in a series of community workshops

By the end of tonight, you will:

- Understand the **new alignment alternatives** proposed in Morgan Hill and Gilroy
- Learn about the methodology of **traffic and circulation** analysis
- Discuss how a new **station** will connect with the broader community

AGENDA

- **Open house** 6:00 p.m.
- **Welcome** 6:30 p.m.
- **New at-grade alignments** 6:40 p.m.
- **Traffic and circulation analysis** 7:00 p.m.
- **High-speed train station design** 7:20 p.m.
- **Moderated Q&A** 7:40 p.m.
- **Next steps** 8:00 p.m.
- **Resume open house** 8:05 p.m.

RECAP OF MILESTONES

- **2005:** *Final Program Environmental Impact Report/Statement for the Proposed California High-Speed Train System*
- **2008**: *Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/Statement*
- **2008:** California-voter approval of Proposition 1A
- **2010:** *Revised Bay Area to Central Valley High-Speed Train Program Environmental Impact Report*
- **May 2011**: Released Supplemental AA Report to be included in a project Draft EIR/EIS
- **Next**: Release a project Draft EIR/EIS (early 2012)

WORKSHOP TOPICS COVERED

- ✓ Alignment development
- ✓ Sound
- ✓ Visual analysis
- ➢ New at-grade alignments *(tonight)*
- ➢ Traffic and circulation analysis methodology *(tonight)*
- ➢ Station function and design *(tonight)*

SUPPLEMENTAL ALTERNATIVES ANALYSIS REPORT

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SUPPLEMENTAL ALTERNATIVES ANALYSIS REPORT

- Presented report on May 5, 2011
- New alignments added in Morgan Hill-Gilroy, Pacheco Pass, and San Joaquin Valley Crossing subsections
- May – June 2011: Public and Technical Working Group meetings
  - Morgan Hill, Gilroy, Merced, Los Banos

MORGAN HILL-GILROY SUBSECTION

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EAST GILROY
PROPOSED ADDITIONAL DESIGN OPTIONS

Preliminary AA → At-grade
Supplementary AA → Aerial, At-grade
Gilroy requested adding aerial design option to accommodate existing & future roadways

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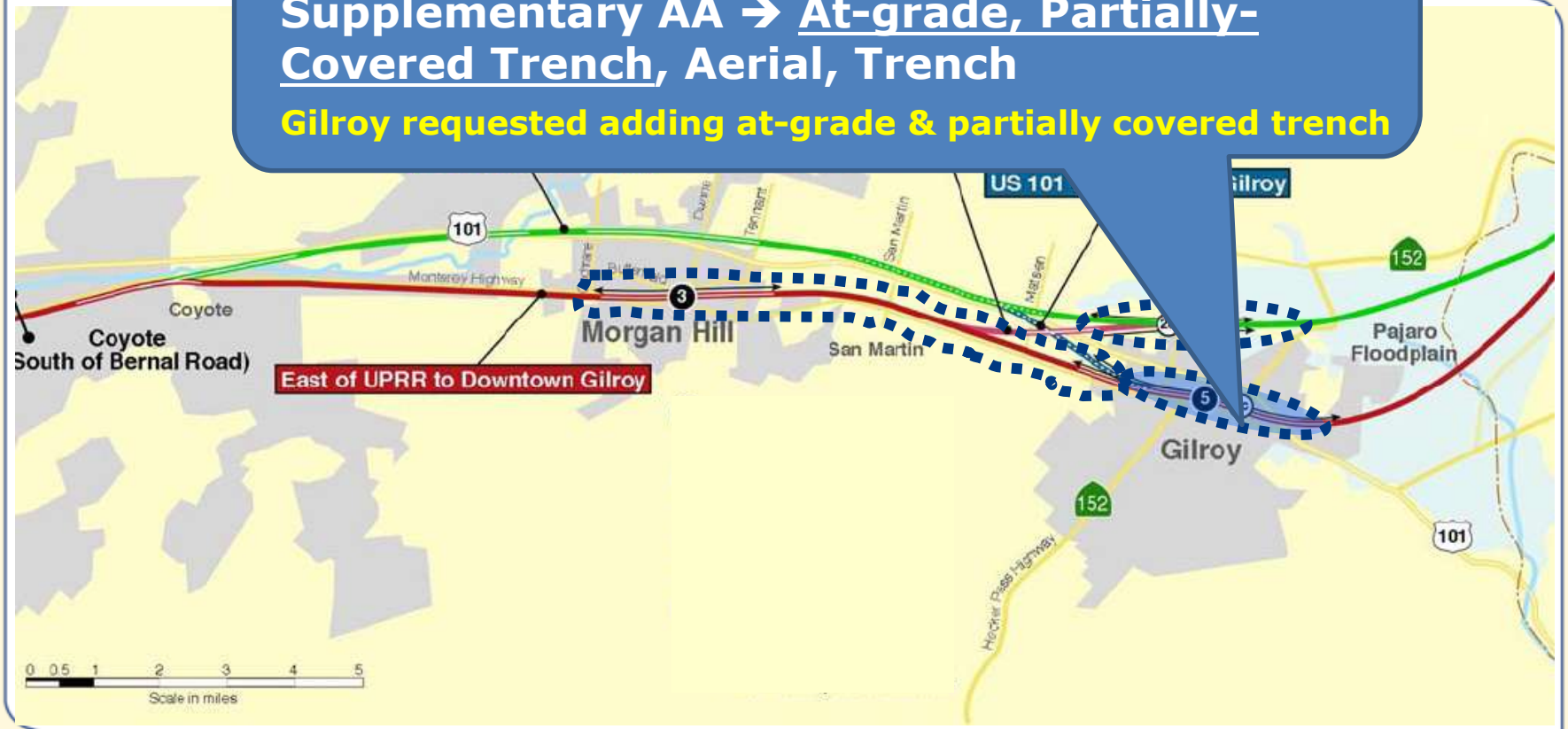
MORGAN HILL AREA
PROPOSED ADDITIONAL DESIGN OPTION

Preliminary AA → Aerial
Supplementary AA → At-grade, Aerial
Morgan Hill requested adding at-grade

DOWNTOWN GILROY
PROPOSED ADDITIONAL DESIGN OPTIONS

Preliminary AA → Aerial, Trench
Supplementary AA → At-grade, Partially-Covered Trench, Aerial, Trench

Gilroy requested adding at-grade & partially covered trench



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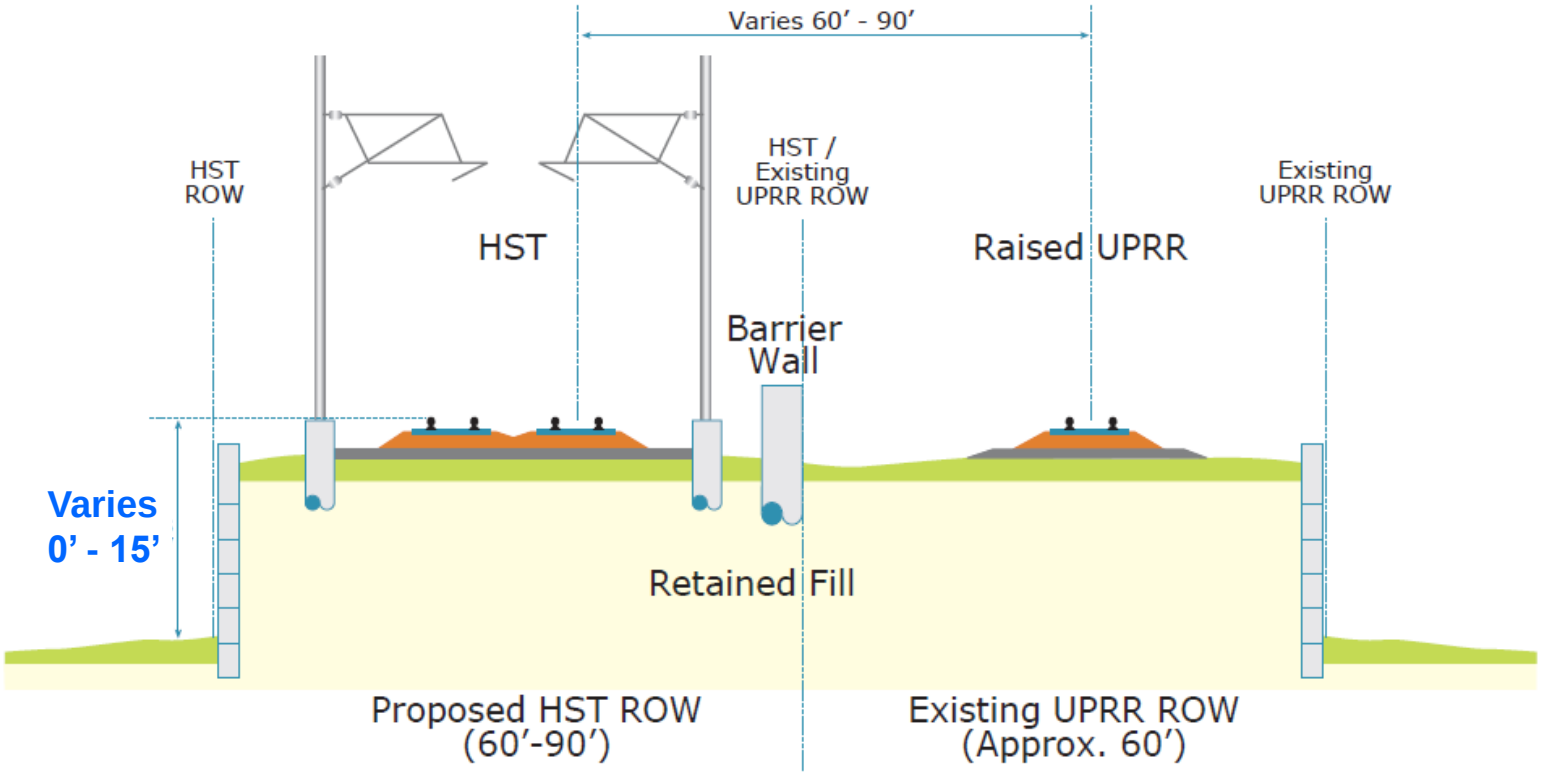
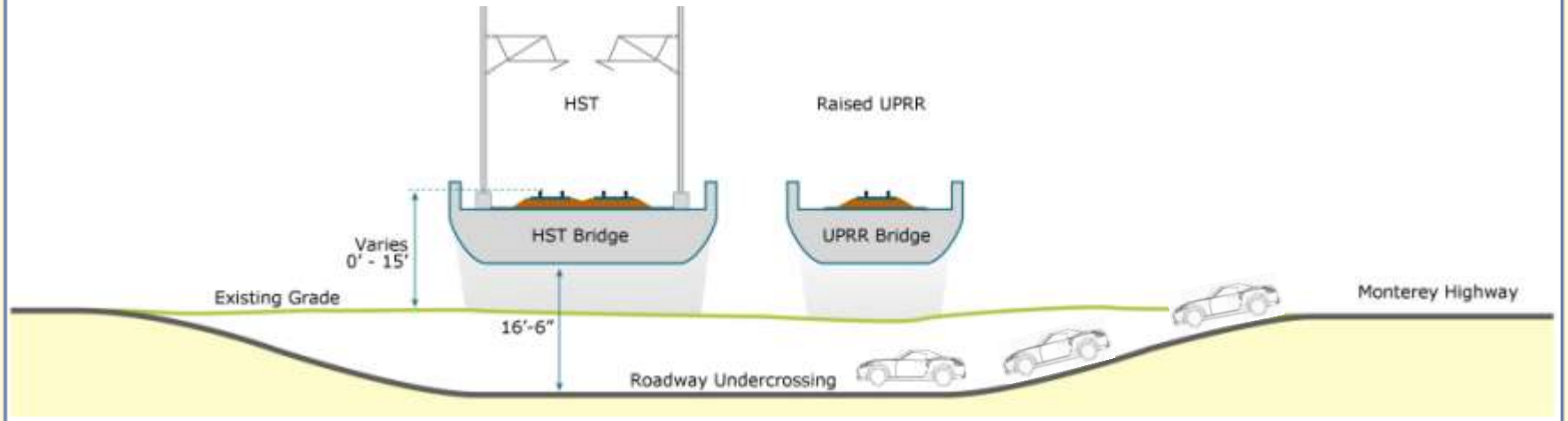
TYPICAL AT-GRADE SECTION



MORGAN HILL BERM SIMULATION

TYPICAL ROADWAY UNDERCROSSING SECTION



EXISTING UNDERPASS AT-GRADE (ON RETAINED FILL)

Howard Street, San Carlos

ALIGNMENT ALTERNATIVES BEING EVALUATED IN EIR/EIS

New (SAA) alignment alternatives shown in **BOLD**:

- East of UPRR to Downtown Gilroy Alignment Alternative
  (design options in Morgan Hill: aerial, **at-grade**)
  (design options in Downtown Gilroy: aerial, open trench, **at-grade, partially covered trench.)**

- East of UPRR to East Gilroy Alignment Alternative
  (design options in Morgan Hill: aerial, **at-grade**)
  (design options in East Gilroy Station area: at-grade, **aerial**)

ALIGNMENT ALTERNATIVES BEING EVALUATED IN EIR/EIS

New (SAA) alignment alternatives shown in **BOLD**:

- US 101 to Downtown Gilroy (design options in Downtown Gilroy: aerial, open trench, **at-grade, partially covered trench)**

- US 101 to East Gilroy (design options in East Gilroy Station area: at-grade, **aerial in station area)**

STATION OPTIONS BEING EVALUATED IN EIR/EIS

New (SAA) station alternatives shown in **BOLD**:

- Gilroy Downtown Station (design options: aerial, trench, **partially covered trench, at-grade**)

- East Gilroy Station (design options: at-grade, **aerial in station area**)

TRAFFIC AND CIRCULATION METHODOLOGY

KEY TERMS

High-Speed Train, Ridership

- Boardings: number of passengers who get on the train
- Alightings: number of passengers who disembark

Roadways, Traffic

- Mode: Method of transportation (e.g.: personal car, taxi, bus, bike, walk)
- Trips: Represents travel from Point A to Point B
  - Four people use **four cars** = **4 trips**
  - Four people use **one car** = **1 trip**
  - Four people use **four bikes** = **4 trips**

TRAFFIC AND CIRCULATION METHODOLOGY

- Follow formal guidelines from the state, regional/local agencies and the California High-Speed Rail Authority

  Step 1: Determine changes in traffic patterns and volumes

  - How many riders will use Gilroy station?
  - How will riders travel to/from the station?
  - How many vehicles will riders use?

  Step 2: Evaluate key intersections and freeway segments for delay or congestion

  Step 3: Develop mitigation measures

HOW MANY PEOPLE WILL USE GILROY STATION?

- Gilroy Station in year 2035: 4,700 – 6,700 boardings/day
  - Northbound: 3,100
  - Southbound: 3,600
- Traffic is studied using the "maximum case": 6,700 boardings/day
  - Year 2035 projections
  - Full system buildout
  - Lowest ticket price (50% of airfare)

HOW WILL RIDERS ARRIVE?

Bicycle image: Wikipedia user PRA. Cab and Zipcar images: Mario Roberto Duran Ortiz. Caltrain image: Wikipedia user Snty-tact.

HOW WILL RIDERS ARRIVE?

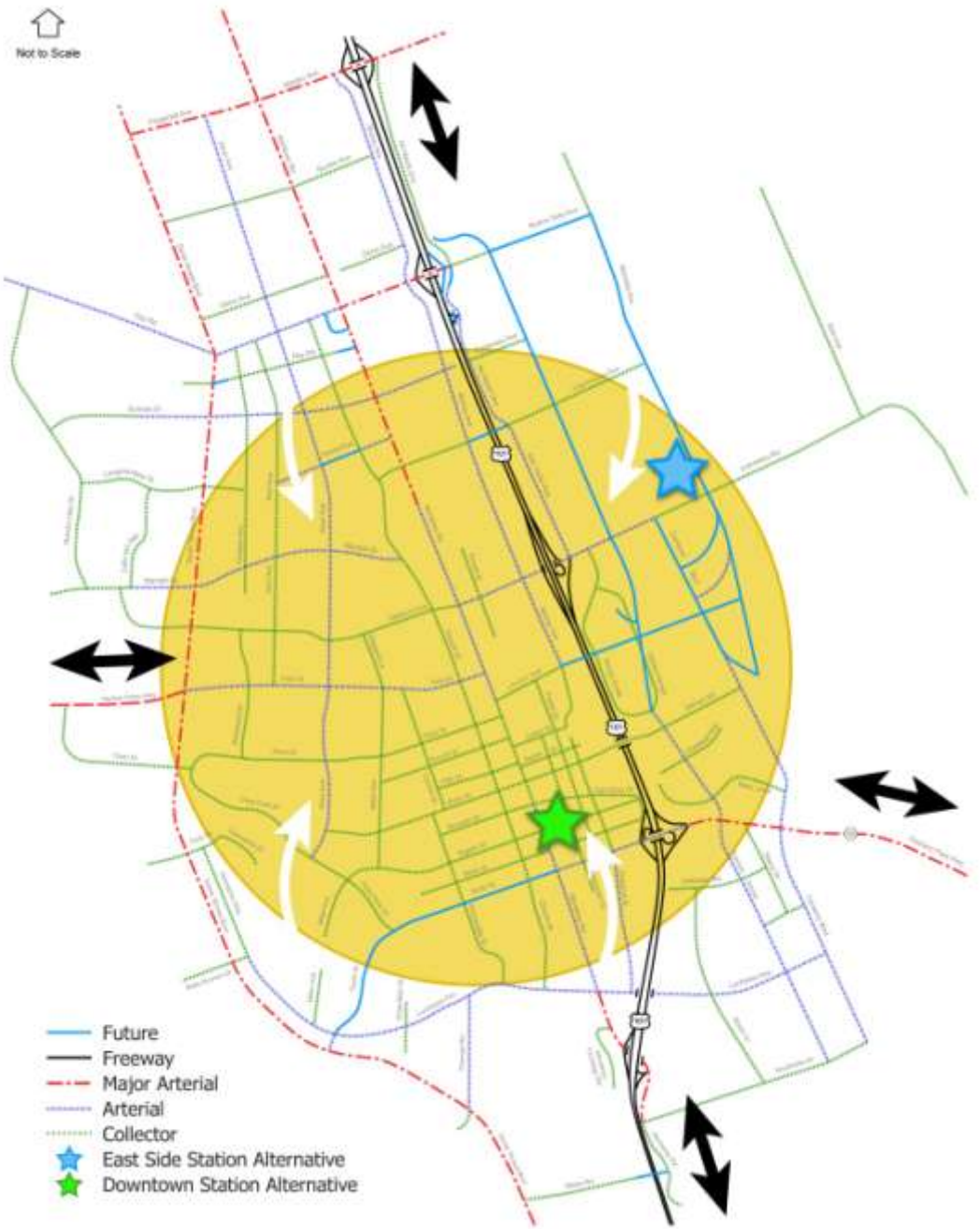
Average Daily Trip Generation by Mode, year 2035						
	Trips (# of cars)				Trips (# of people)	
	Pick-up/ Drop Off	Drive & park	Rental Car	Taxi	Train/ Bus	Walk/ Bike/ Other
Gilroy Station	1,200	2,100	200	300	200	200

2009 CHSRA Business Plan

- Use boardings information to calculate how many traffic trips will impact Gilroy's transportation network
- Some riders will carpool

HOW WILL RIDERS ARRIVE?

- 15% Local traffic
- 30% South of Gilroy
- 18% North of Gilroy
- 22% Monterey Bay Coast
- 15% Pacheco Pass



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ANALYZING TRAFFIC IMPACTS

- The analysis examines impacts during peak hours
- Daily trips: 8,000 trips/day
  - Comparable to neighborhood shopping center

High-Speed Train
Gilroy Station

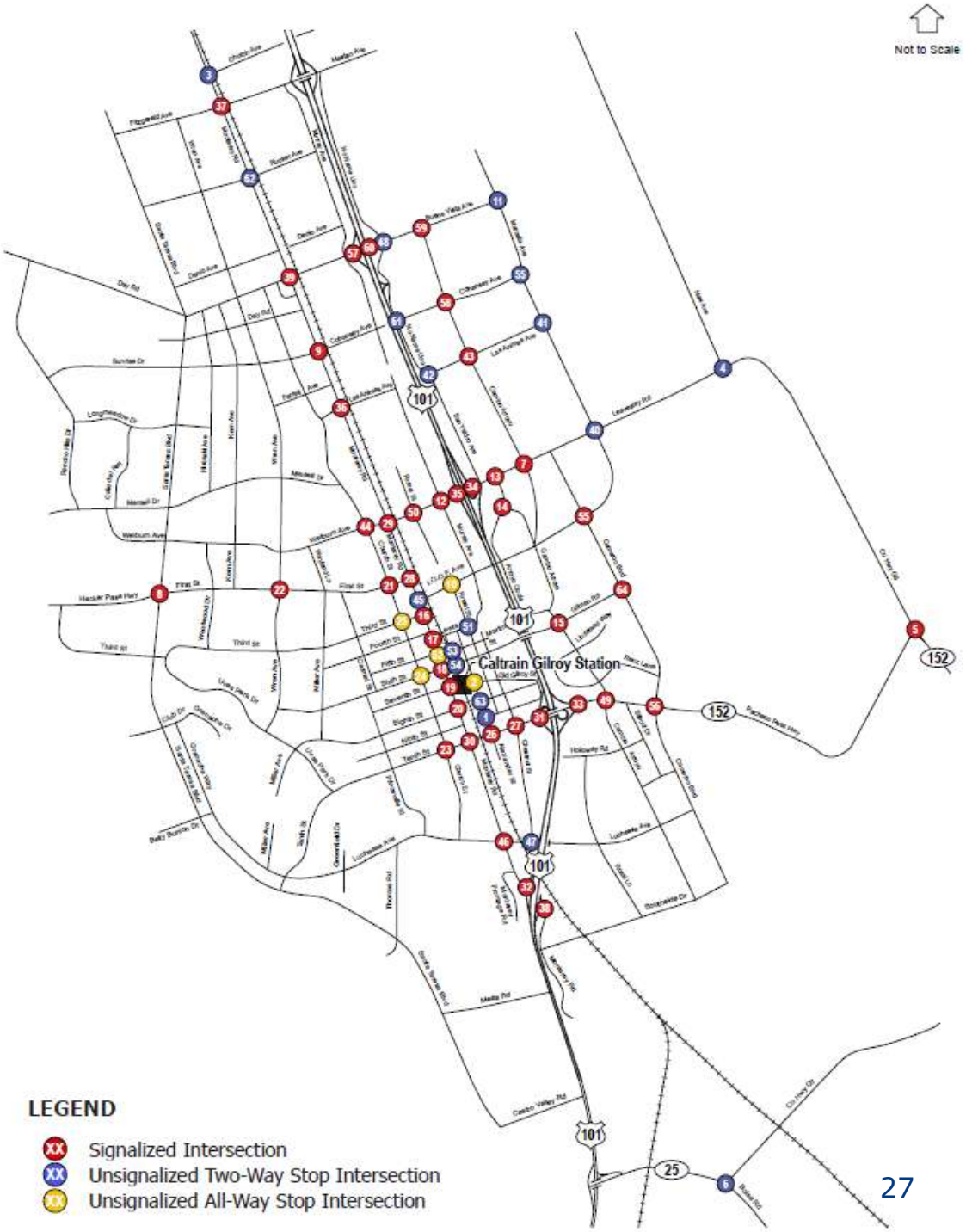
Image: Mark L, Yahoo.com

Neighborhood Shopping Center
(around 150,000 square feet)

8,000 daily auto trips ⟷ **8,000 daily auto trips**

STUDY INTERSECTIONS

- City staff and the project team evaluate intersections that are critical to the city's transportation network



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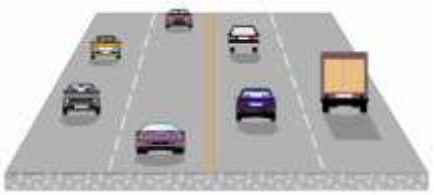
EVALUATING LEVEL OF SERVICE (LOS)

- Level of Service (LOS) is the chief measure of "quality of service"
  - Describes operational conditions
  - Does not include safety
  - Six measures (A through F)

DEFINITIONS: LEVEL OF SERVICE (LOS)

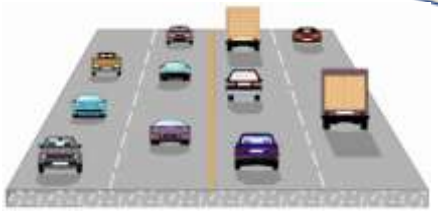
A
<10 sec

B
11-20 sec



C
21-35 sec

D
36-55 sec



E
56-80 sec

F
>80 sec

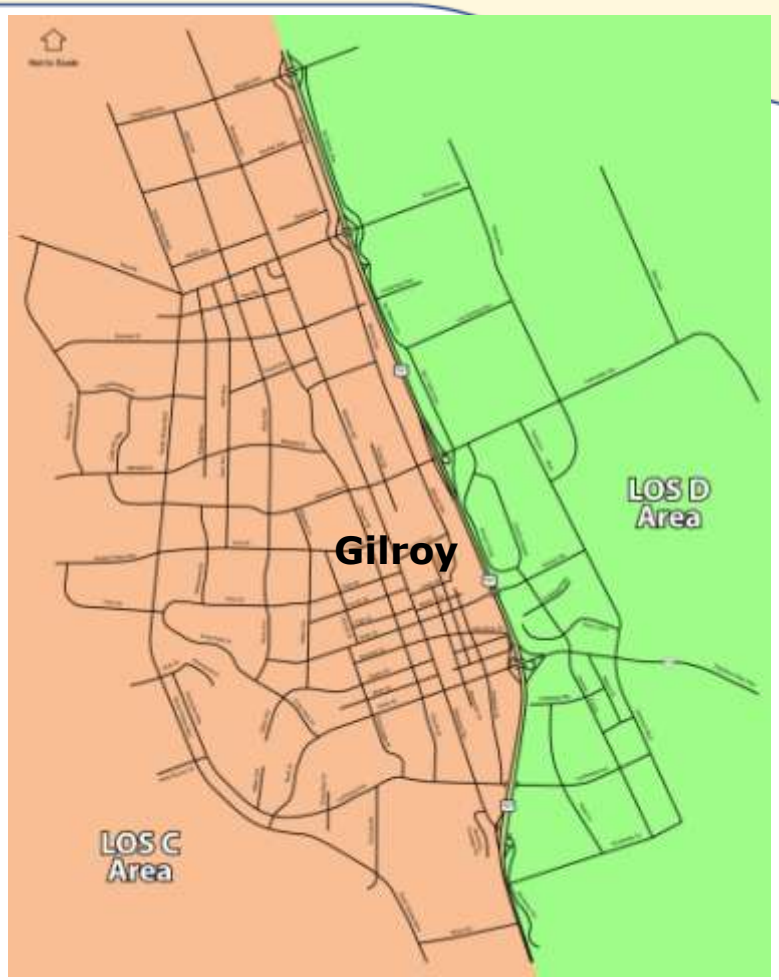
Intersection LOS measured in **"delay per vehicle" in seconds*

ENVIRONMENTAL ANALYSIS SCENARIOS

	Existing Conditions	Year 2035 Conditions
"No Build"	Existing traffic levels	2035 traffic levels with regional improvements
"Build"	Existing traffic levels + traffic with HST project	2035 traffic levels with planned regional improvements + traffic with HST project

IMPACT THRESHOLDS

- Local and state policies shape impact thresholds
- Impact thresholds typically depend upon existing conditions



PROJECT MITIGATION MEASURES

- Examples of mitigation methods:
  - Improve signal timing and synchronization
  - Add signals to un-signalized intersections
  - Add to roadway capacity

Image: Wikipedia user Bidgee

STATION DESIGN OVERVIEW

STATION DESIGN PROCESS

California High-Speed Rail Authority Station Responsibilities	City of Gilroy Station Visioning Process
• Provide a functional station and related infrastructure	• Study pros/cons of the Downtown Gilroy and East Gilroy potential station locations
• Design a functional station sensitive to its surroundings	• Provide a recommendation to the Authority on where the Gilroy station should be located
• Provide recommendations for parking	• Provide a land use and transportation framework for each station
• Identify potential impacts and mitigation measures for each station option (Draft EIR/EIS)	• Provide a framework for a Station Area Plan for the preferred station

STATION DESIGN

- Station design considerations:
  - Functional station components
  - Connectivity to surrounding community
  - Ridership
  - Traffic and circulation
  - Parking
- Opportunity for mixed-use development

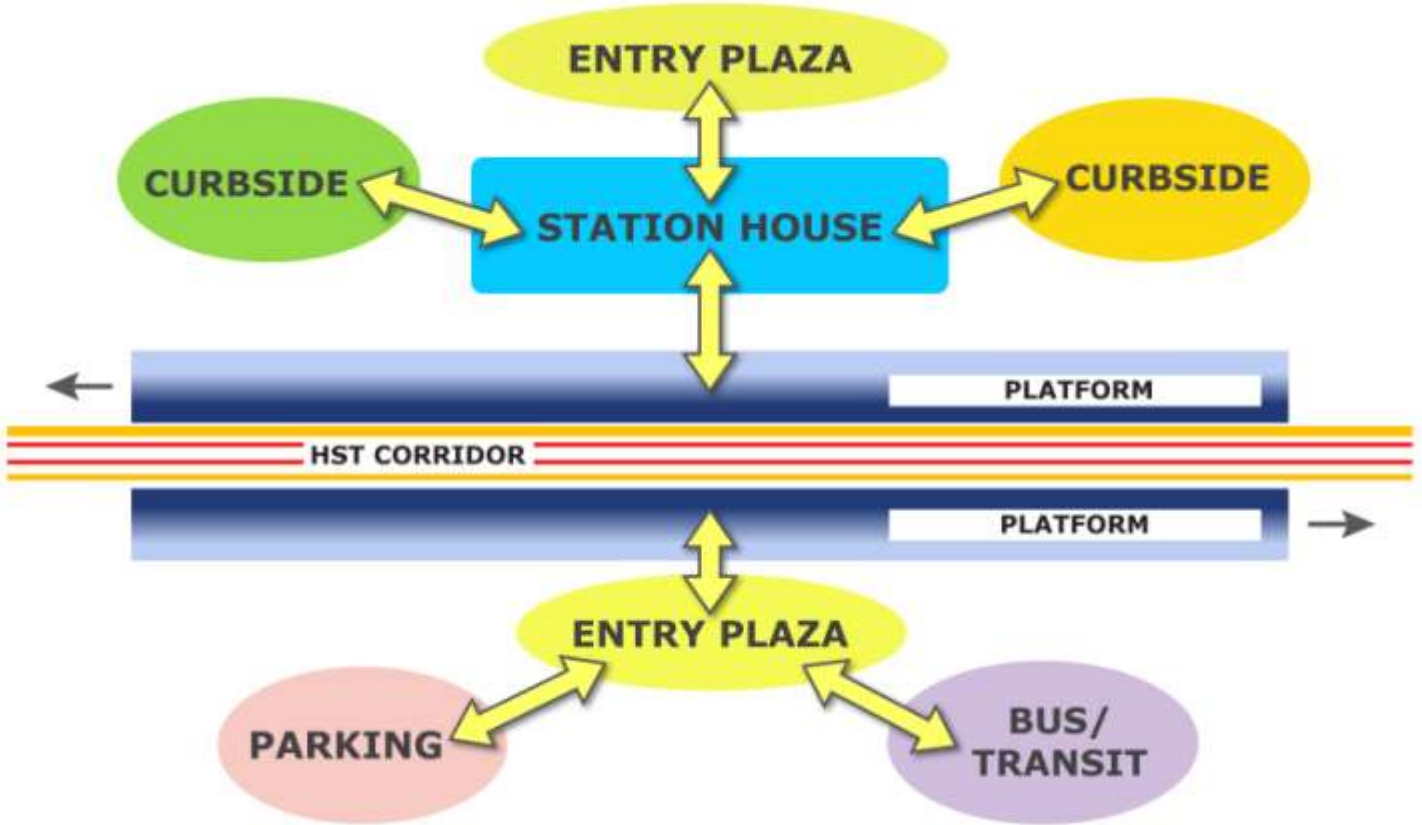
HST STATION ROLES

	Transportation	*Land Use*
High-Speed Train System roles	Facilitate access to HST and transfers with alternate modes	Provide goods and services tailored to passengers
Community roles	Encourage local use of HST and public transit	Stimulate and support sustainable urban development

CHSRA STATION GUIDELINES

- Promote station accessibility
- Ensure access to multi-modal transit options
- Facilitate ease of movement and directness of circulation for passengers, transit and vehicles
- Connect to pedestrian, bicycle and street circulation networks
- Coordinate site plan with local planning efforts to support local and regional development objectives

HST STATION – CONCEPTUAL LAYOUT OF FUNCTIONAL COMPONENTS



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STATION ACTIVITIES

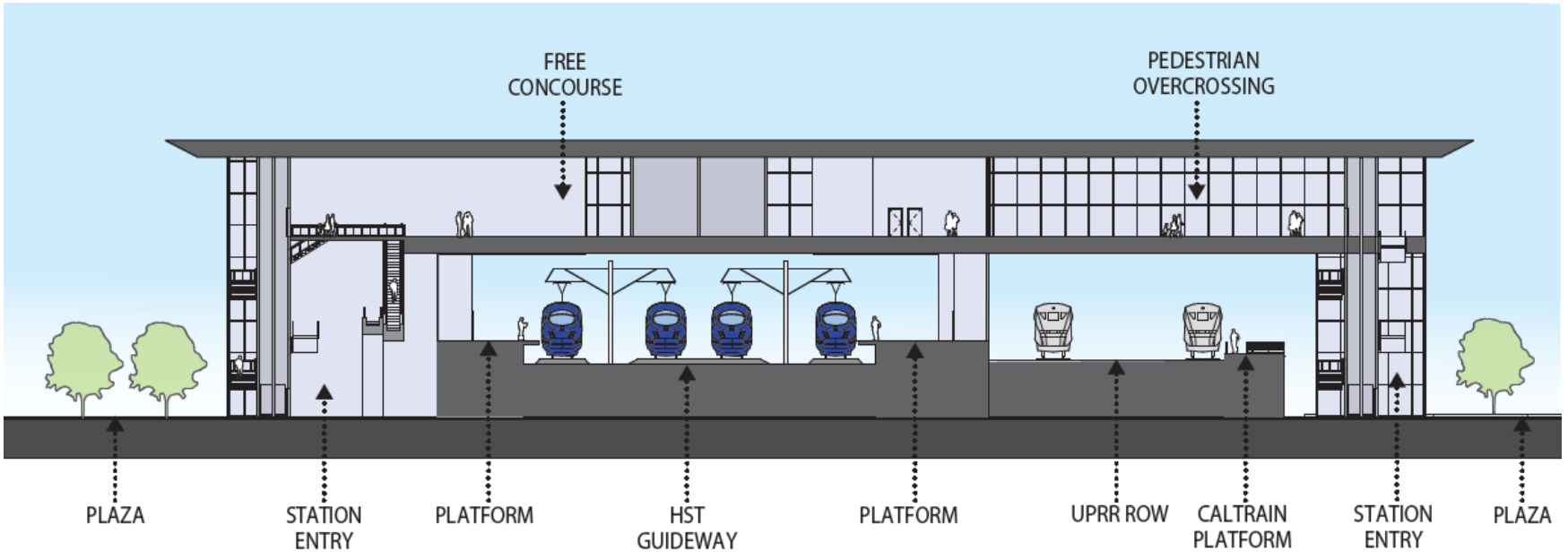
Passengers and Greeters:

- Obtaining travel information
- Purchasing or validating a ticket
- Going through fare gates
- Waiting to board a train
- Getting off a train
  - Dropping or picking someone off
  - Waiting for arriving passengers
  - Purchasing and consuming goods/ food
- Restrooms

Staff:

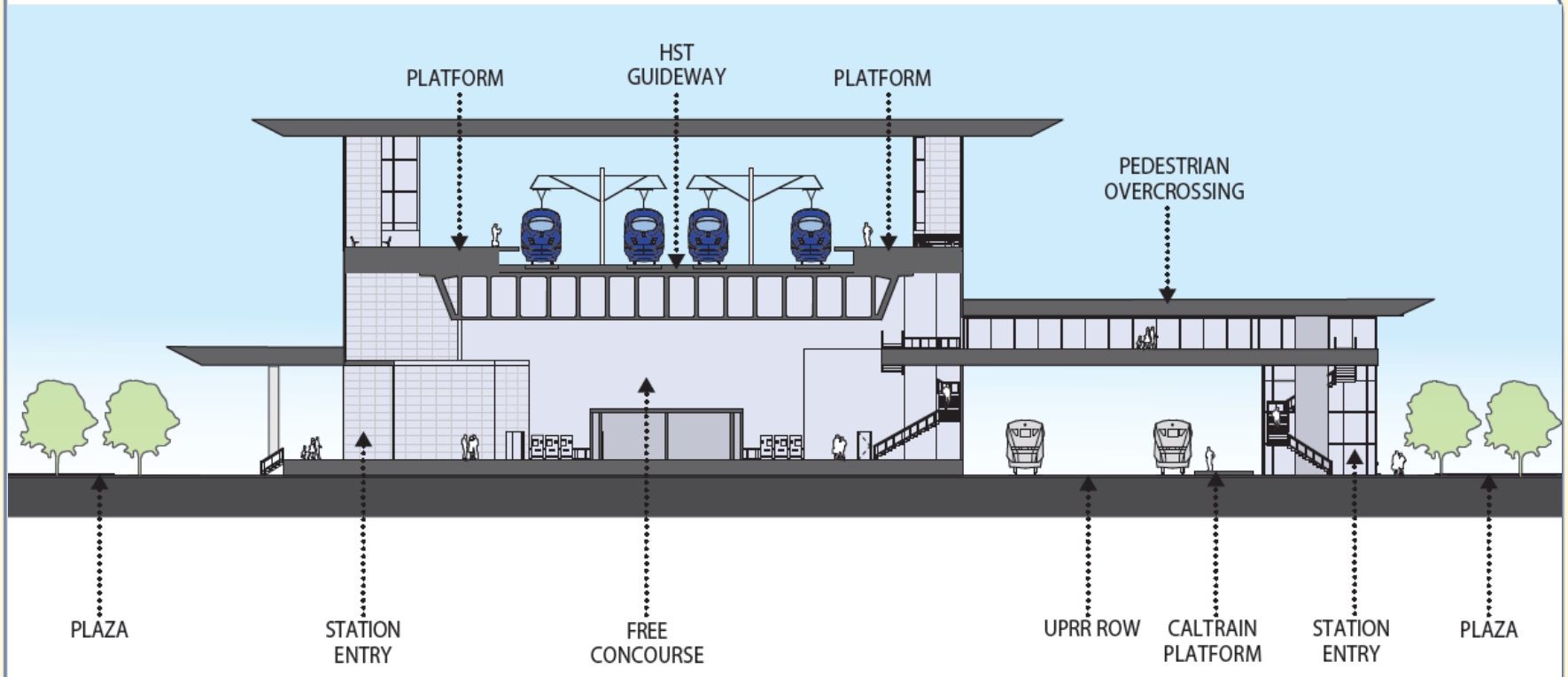
- Ticket and information providers
- On- platform assistance with train boarding and disembarking activities
- Station management
- Mechanical and Electrical operations (back-of-the-house)
- Security operations
- Maintenance

DOWNTOWN AT-GRADE STATION CROSS SECTION



** Conceptual, subject to change*

DOWNTOWN AERIAL STATION CROSS SECTION



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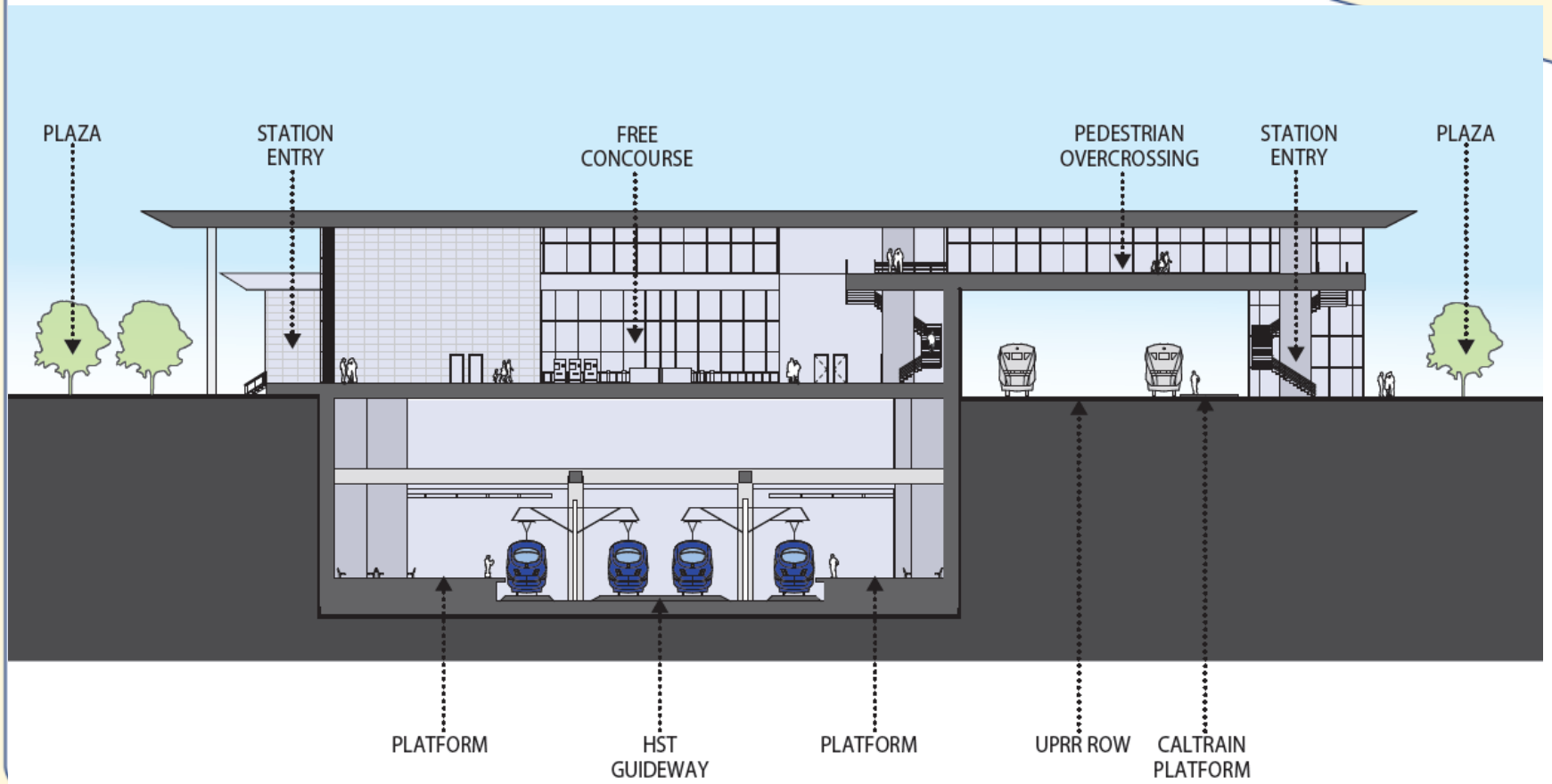
DOWNTOWN TRENCH STATION CROSS SECTION



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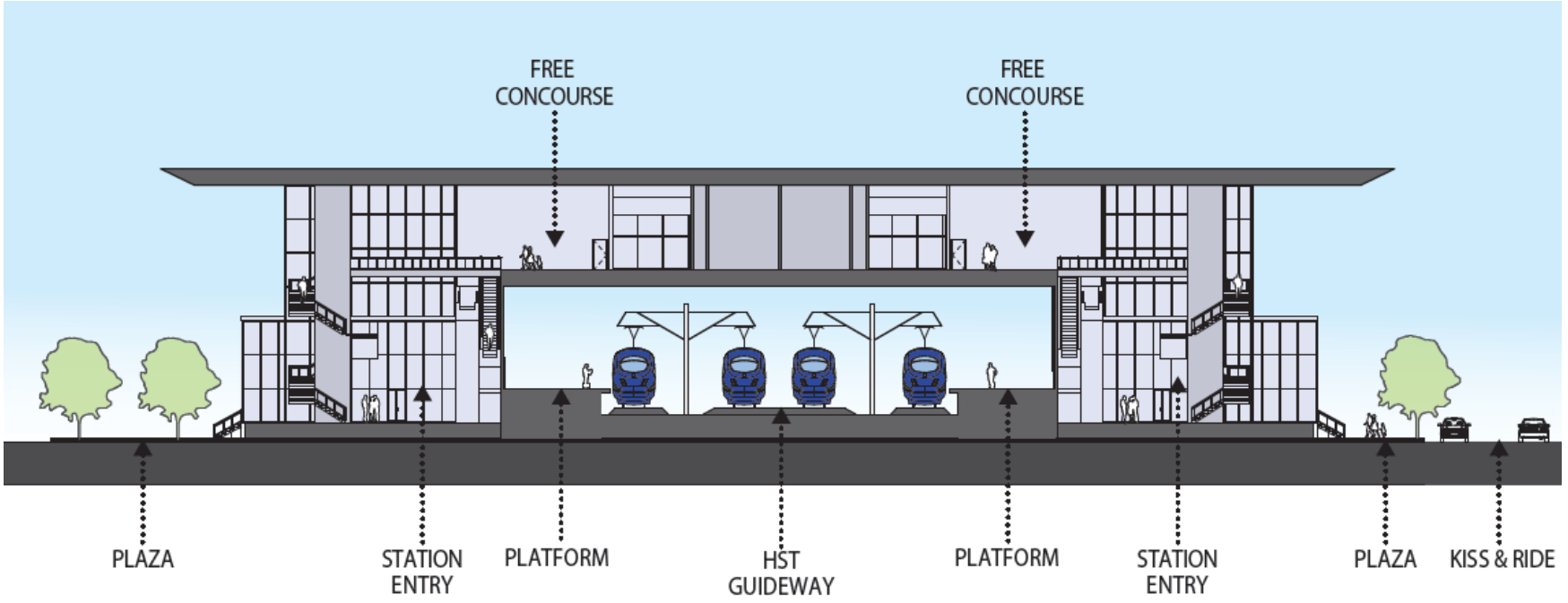
EAST GILROY AT-GRADE STATION CROSS SECTION



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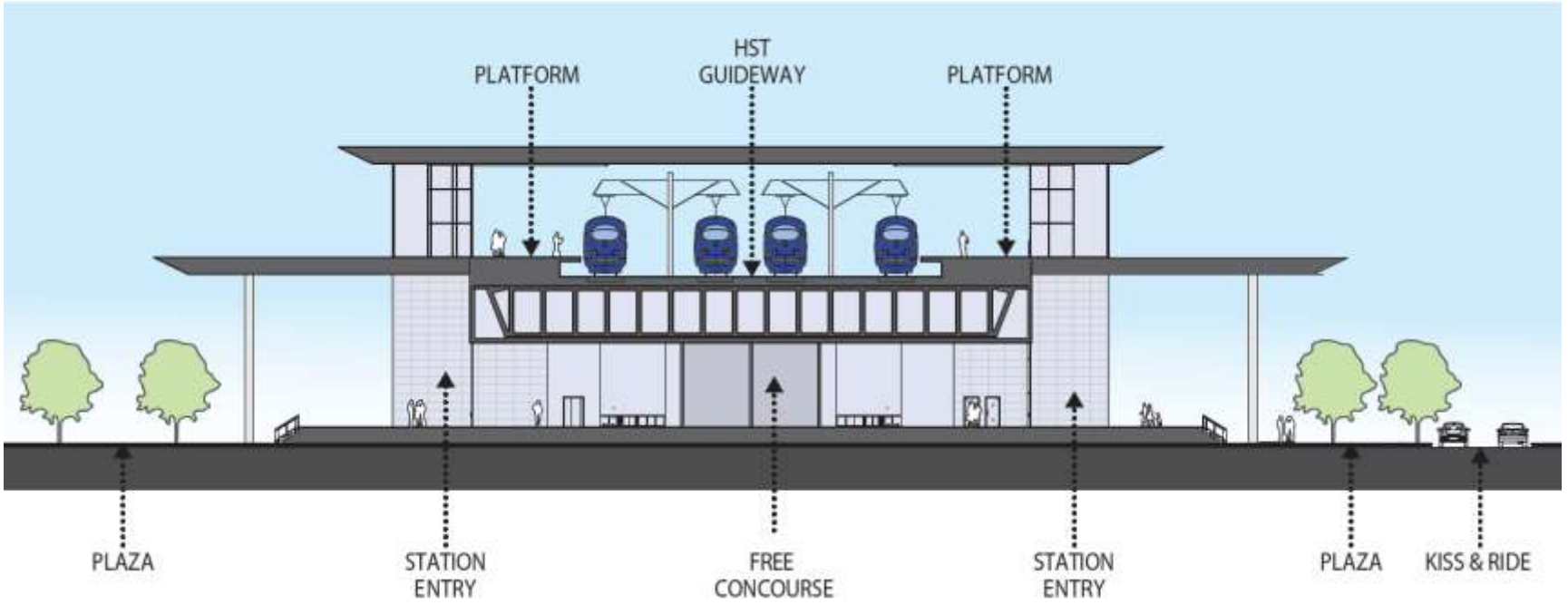
EAST GILROY AERIAL STATION CROSS SECTION



** Conceptual, subject to change*

NEXT STEPS


2010
2011
2012
WINTER
SPRING
SUMMER
FALL
WINTER
SPRING
SUMMER
FALL
WINTER
SPRING
SUMMER
FALL
Preliminary Engineering and Environmental Milestones
Alternatives Analysis and Technical Reports
15% Draft Engineering
15% Engineering
Admin Draft EIR/EIS
Draft EIR/EIS
Circulate
Final EIR/EIS
NOD
ROD
Final EIR/ EIS to CHSRA Board
Key Milestones
Draft AA
Preliminary AA
Supplemental
Public Hearings
Report on San Jose Visual Design Guidelines
Supplemental AA Report for San Jose
Draft EIR/EIS
Final EIR/EIS

QUESTIONS/COMMENTS

Contact Us:

- **Website:** http://www.cahighspeedrail.ca.gov
- **Phone:** 1-800-881-5799

Comments:

- **Email:** san.jose_merced@hsr.ca.gov
- **Postal Mail:**
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  San Jose to Merced Section
  770 L Street, Suite 800
  Sacramento, CA 95814

Thank you!